

# U.S. EPA Region 8 Office of Enforcement, Compliance and •Environmental Justice•

## Elevated Blood Lead Levels in Minority and low Income Children

An EPA Region 8 Environmental Justice Initiative

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**What is Environmental Justice?**

**EPA Defines “Environmental Justice” as:**

**The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development of environmental laws, regulations, and policies.**

**ENVIRONMENTAL JUSTICE**

The background of the slide features a large, semi-transparent logo. The logo is a shield-like shape divided into four quadrants. The top-left quadrant is blue and contains a white balance scale. The top-right quadrant is green and contains a white silhouette of a city skyline. The bottom-left quadrant is blue and contains a white globe. The bottom-right quadrant is green and contains a white silhouette of a factory with smokestacks. The words "ENVIRONMENTAL JUSTICE" are written in white, bold, capital letters across the bottom of the logo.

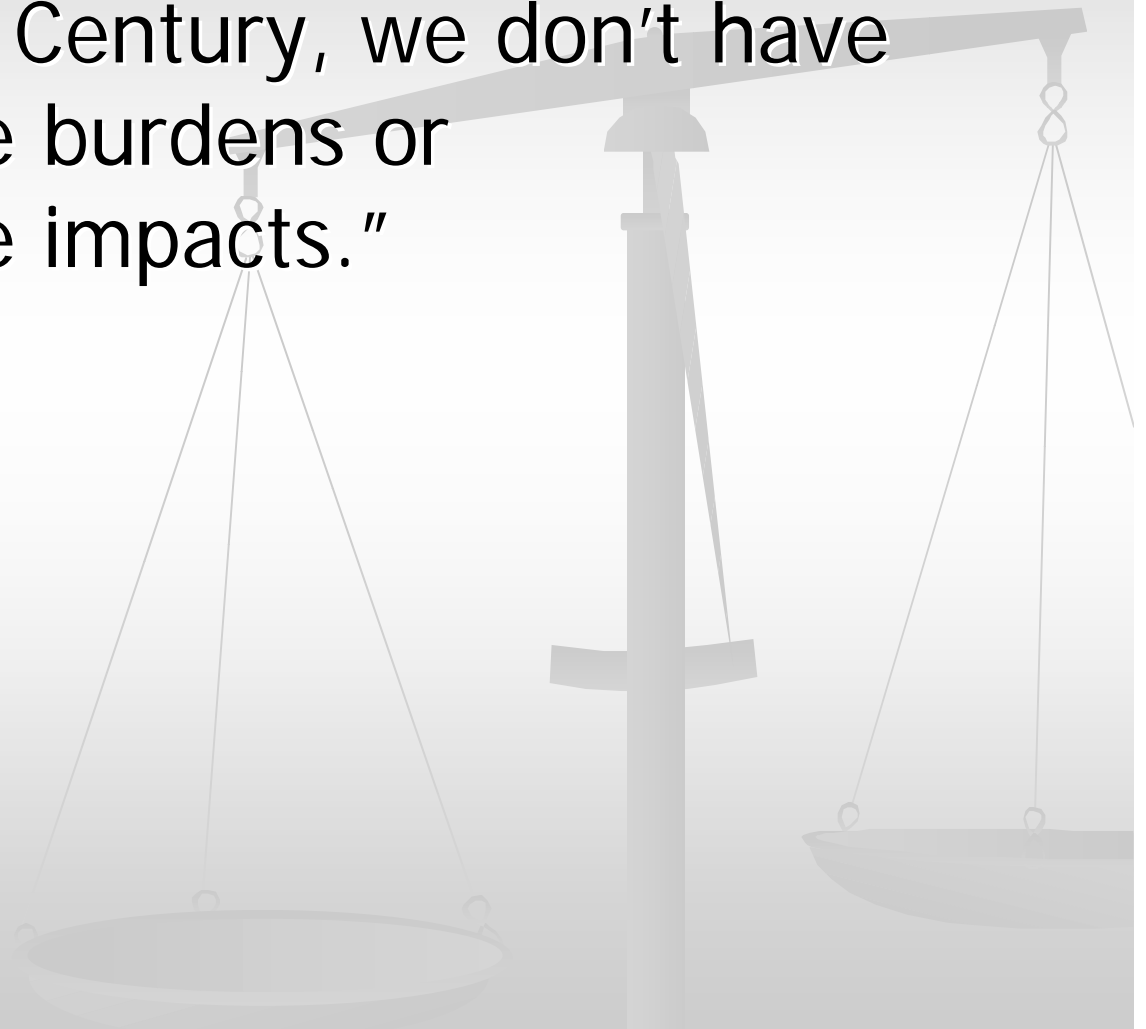
# Defining “Environmental Justice”

“Fair treatment” means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

-----→ **Disproportionate Environmental Burden**

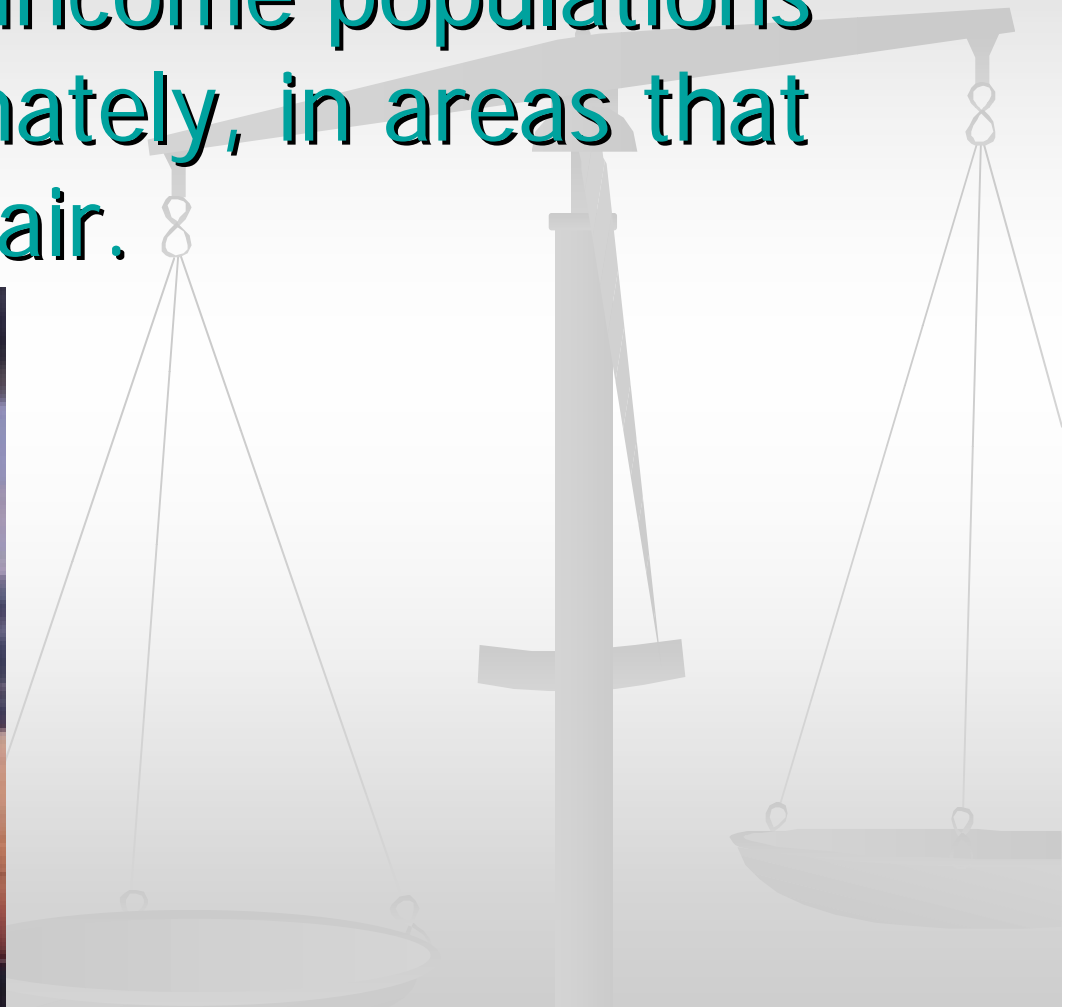
# Disproportionate Burden?

- “This is the 21<sup>st</sup> Century, we don’t have disproportionate burdens or disproportionate impacts.”



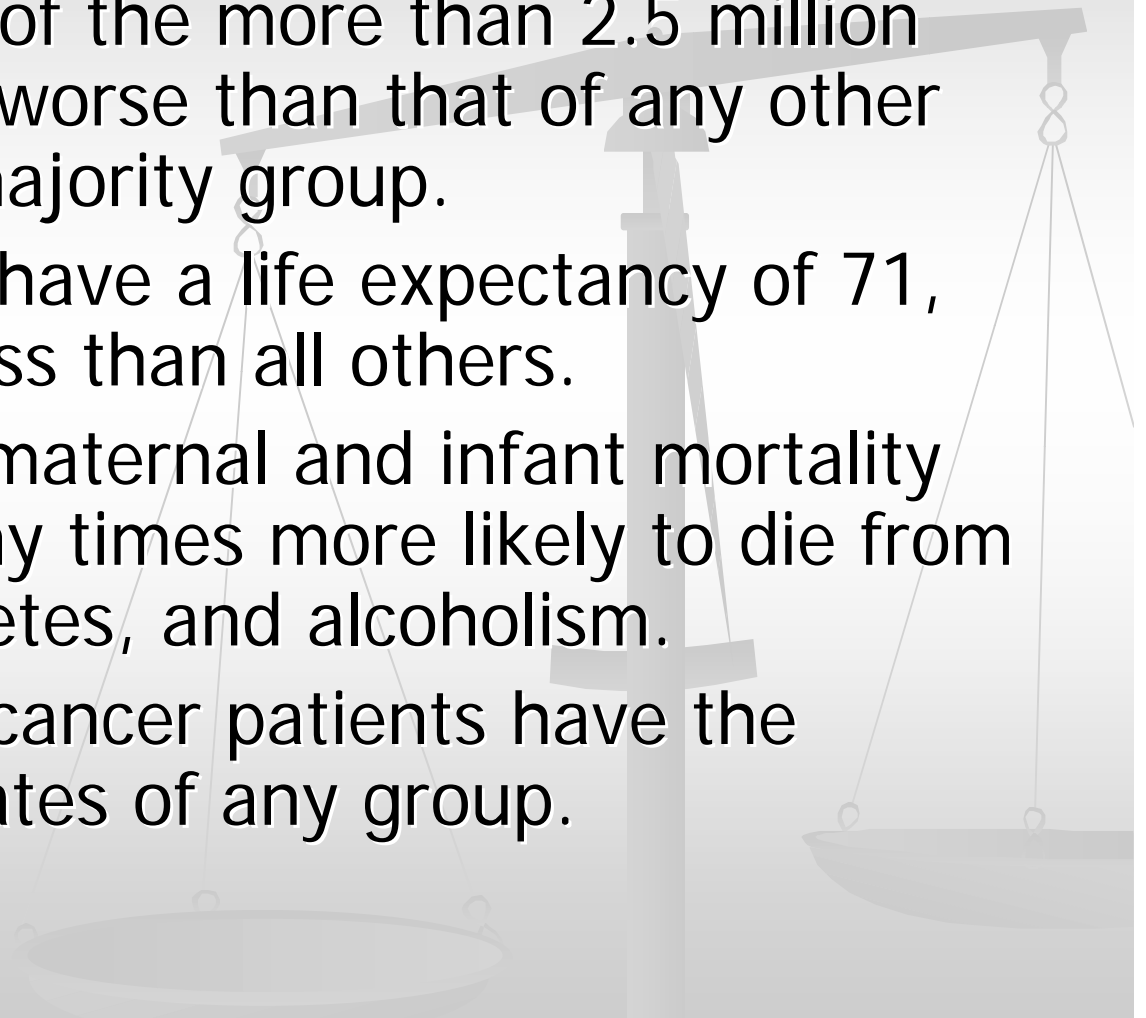
# Disproportionate Environmental Burden:

Minority and low-income populations live, disproportionately, in areas that have unhealthy air.



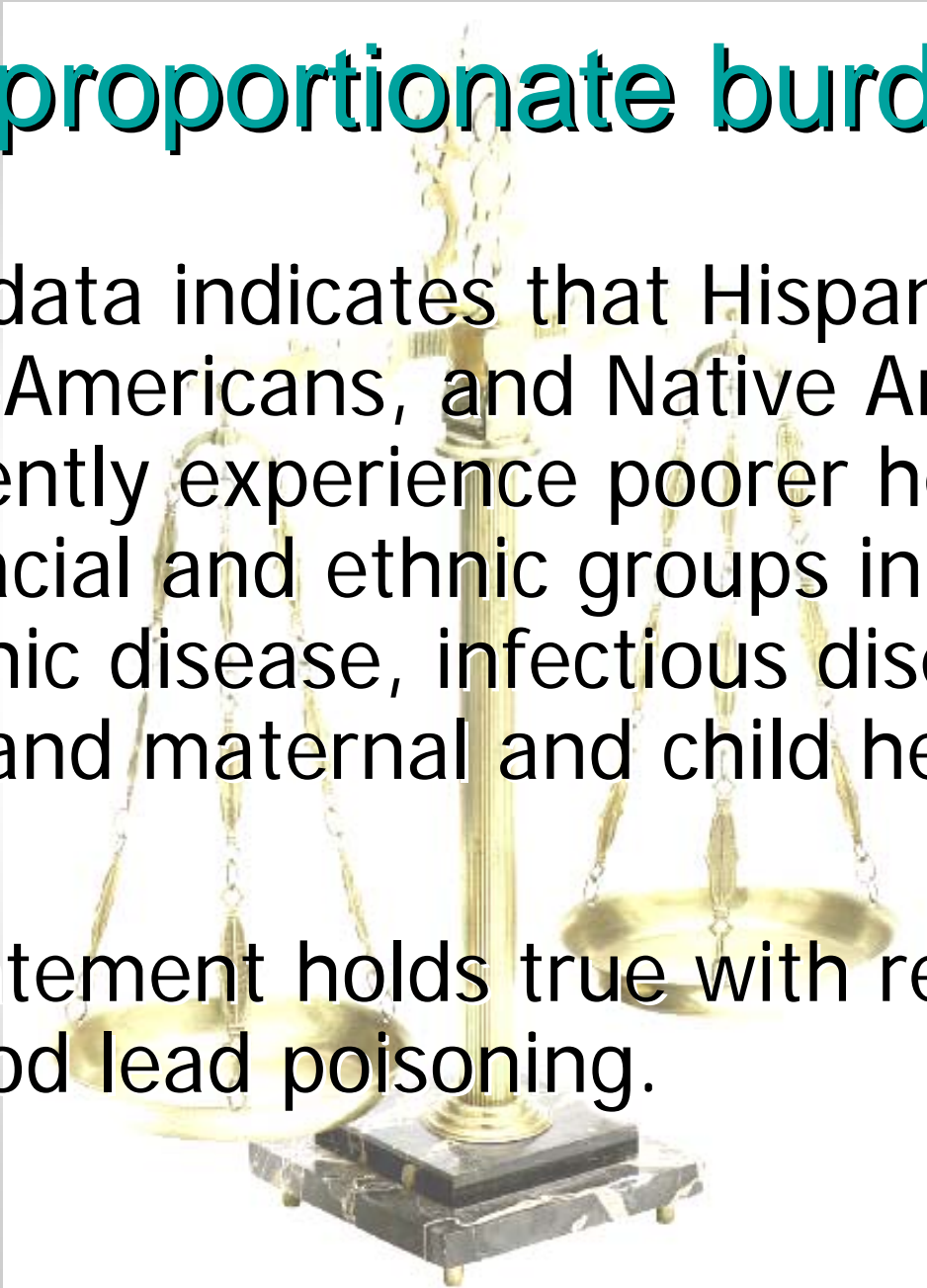
# Disproportionate Impacts

- The health status of the more than 2.5 million tribal members is worse than that of any other U.S. minority or majority group.
- Native Americans have a life expectancy of 71, roughly 5 years less than all others.
- They face higher maternal and infant mortality rates and are many times more likely to die from tuberculosis, diabetes, and alcoholism.
- Native American cancer patients have the poorest survival rates of any group.



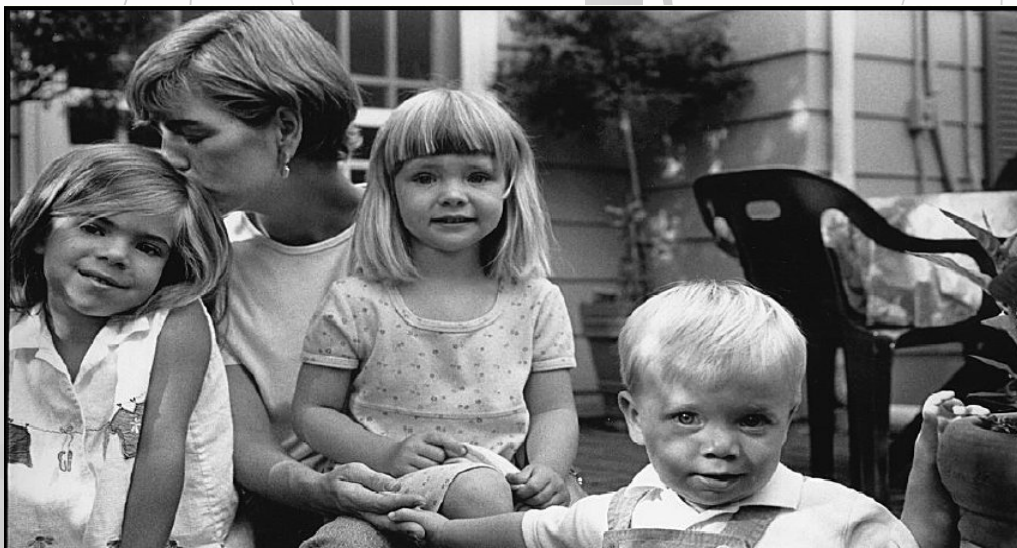
# Disproportionate burden?

- Health data indicates that Hispanics, African-Americans, and Native Americans consistently experience poorer health than other racial and ethnic groups in the areas of chronic disease, infectious disease, injury, and maternal and child health.
- This statement holds true with respect to childhood lead poisoning.



# Vulnerable Populations/Impact:

Children of low-income families comprise 83% of the children ages 1-5 who have blood lead poisoning.

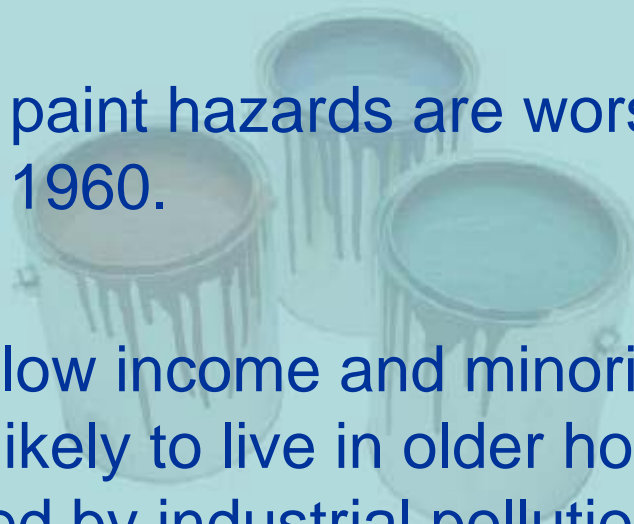






# Why is Lead Poisoning an EJ Issue?

- Lead is a toxin that children are exposed to through environmental sources such as paint and soil.
- Lead based paint hazards are worst in housing built before 1960.
- Children of low income and minority families are more likely to live in older housing and areas affected by industrial pollution.
- Therefore, Environmental Justice communities are disproportionately affected by lead poisoning.



## Outreach and Education Project

### Where is Lead Found?

- Lead-based paint
- Lead-contaminated dust
- Lead-contaminated soil
- Lead pipes/soldering
- Refineries/Industry



## Lead in Homes

- 80% of homes built before 1978 contain lead paint; 74% of homes in ND were built before 1979
- Lead paint hazards exacerbated by renovations where paint/walls/carpet/windows/doorways disturbed
- Specific procedures should be followed during renovation
- Case study: “The High Cost Of Improper Removal of Lead-Based Paint from Housing”



Example: In Re: Billy Yee (Region 7)

- Children were diagnosed blood-lead poisoned;
- Hospital notified: children's parent, County, and EPA after obtaining consent;
- Hospital treated children and County ordered landlord to abate;
- EPA enforced against landlord for failing to notify tenant, children's mother.

In re: Billy Yee

The maximum administrative penalty was assessed, because of the magnitude of the harm.

The children's treating physician testified that the most likely source of lead poisoning was from the apartment. The judge found doctor's opinion compelling, noting that the doctor demonstrated a "serious and substantial danger of lead poisoning to the children."

## In re: Billy Yee

1. If we address problems that are known to disproportionately affect minority and low-income communities, we decrease risks and hazards to disproportionately burdened populations.
2. Coordination of efforts among different parties (law enforcement, health agency, EPA, DOJ, HUD, etc...) can produce better results than if each goes it alone.

## Example 2– In re: Billy Yee

3. Desktop tools are readily available that make it easy to obtain demographic, geographic, and pollution loading information.
4. Allowing the victim to tell her story promotes trust between community members and government; and validation of the victim's experience; in addition to providing compelling testimony.

## Blood Lead Screening

- Center for Disease Control and American Academy of Pediatrics agree that all children should be tested at 12 months, 24 months, and between 36 and 72 months, if not already tested
- Blood lead screening is the only way to know if a child has elevated blood lead levels
- Many doctors do not test for lead
  - Misconceptions
  - Lack of follow-up



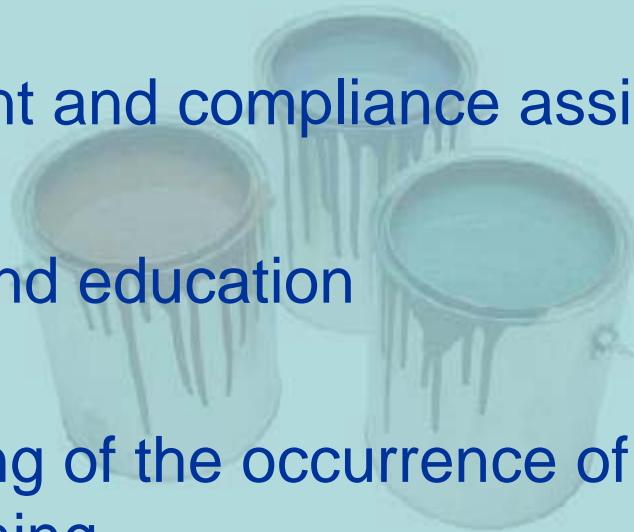




# What is Being Done

The Environmental Justice Program conducts these activities to combat childhood lead poisoning:

- Enforcement and compliance assistance
- Outreach and education
- GIS mapping of the occurrence of childhood lead poisoning
- Collaborative partnerships with state and local agencies



# Compliance Assistance

EPA and HUD have regulatory authority to enforce TSCA 406(b) and the 1018 disclosure rule. These laws aim to control lead exposure by:

- Promulgating lead-safe remodeling practices for contractors performing renovations on properties that may contain lead hazards.
- Requiring that landlords and real estate agents disclose the possible presence of lead exposure hazards upon transfer of property.
- Environmental Justice outreach focuses on increasing compliance by advising professionals and the public of these laws.





# Risk Assessment

If lead control regulations are violated, EPA or state authorities conduct lead risk assessments in homes to identify possible lead hazards.



Risk assessments may also be conducted as a result of a child being diagnosed with elevated blood lead.

Between November 2003 and March 2004, forty-nine risk assessments were conducted in Utah. Thirty-four were in Environmental Justice communities.



# Outreach and Education

The Environmental Justice Program provides public education in order to:

Help families determine if they are at risk for lead poisoning.

Encourage at-risk families to have their children tested for elevated blood lead.

Notify the public of disclosure laws and safe remodeling rules.

Advise the public of resources that are available to help prevent lead poisoning.



# Types of Outreach

The EPA provides public education through the following activities:

- Publishing and distributing booklets that inform the public on lead poisoning prevention and the hazards of lead exposure.
- Providing copies of these documents to healthcare, childcare, environmental and community-based organizations.
- Hiring EJ interns to distribute these booklets at health fairs and other events, and increase public awareness of lead poisoning.
- Providing web-based resources on the EPA's websites.
- Producing and distributing a video on lead poisoning prevention titled "Lead: The Hidden Poison."
- Providing all of these resources in English and Spanish.



This mural in downtown Denver was created by local organizations with support from federal grants. The bilingual message is included to reach EJ communities.



## The Region 8 EPA Environmental Justice Lead Page

### Lead Poisoning Prevention Projects

The EPA has regulatory authority to enforce lead rules related to remodeling practices, hazard abatement and disclosure of lead hazards. In addition to these enforcement activities, the EPA lead program carries out community outreach and education activities. Along with other federal, state and local agencies, the EPA is committed to the goal of eliminating childhood lead poisoning in Colorado by 2010. The following efforts are underway:



- Collaborating with other environmental protection and public health agencies within Colorado to develop an action plan to eliminate childhood lead poisoning by 2010.
- Continuing enforcement of the 1018 lead disclosure rule and the 406(b) lead safe remodeling practices rule.
- Using the Region 8 GIS database to create maps that display the occurrence of elevated blood lead levels in children, along with risk factors for lead poisoning including poverty level and residence in housing built before 1960.

For more information on Lead Projects, contact [Nancy Reish](#), 303-312-6040.

- [Environmental Justice and Lead Poisoning Prevention](#)
- [EPA Lead and Lead Hazards page](#)

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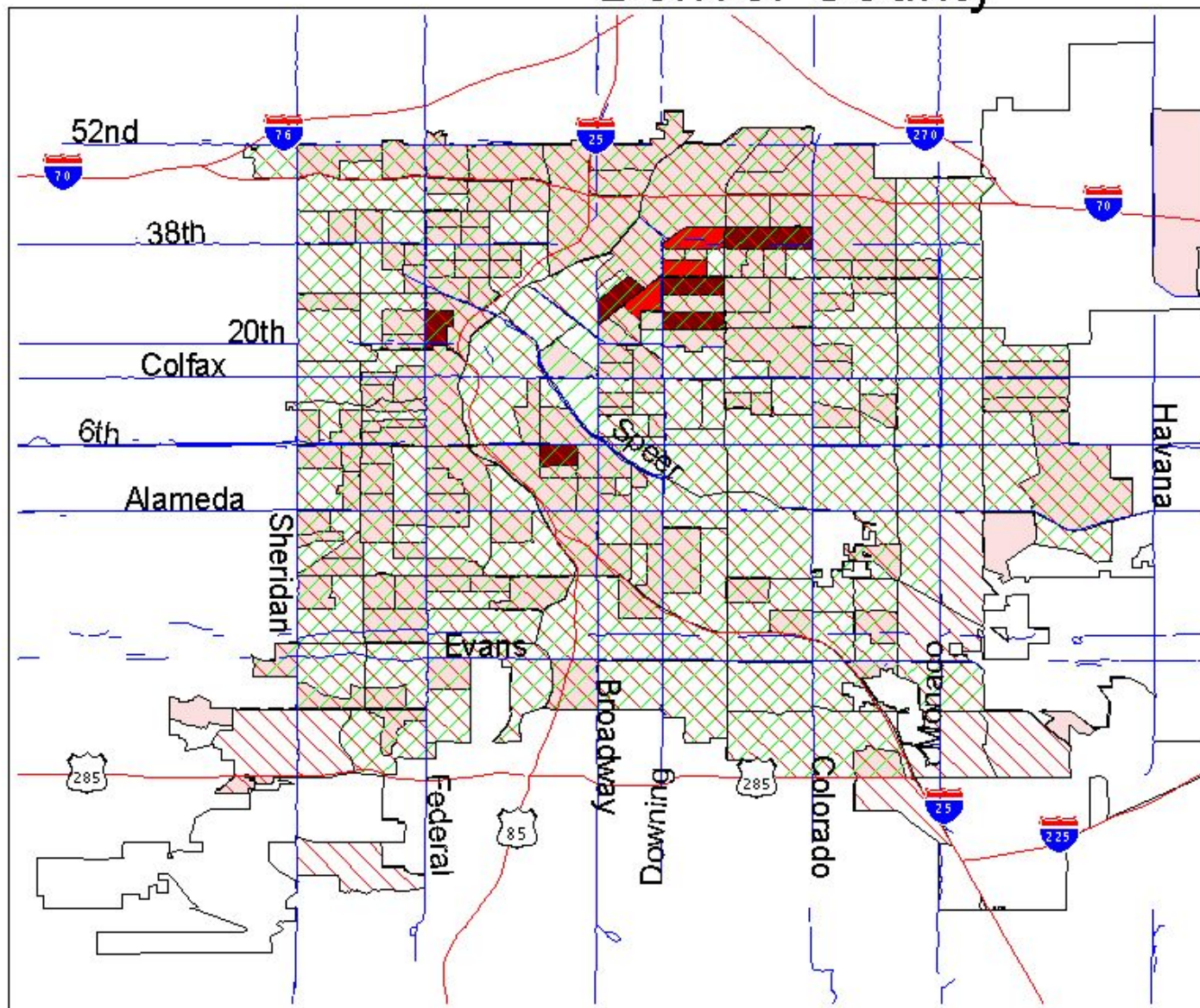
# GIS Mapping Project

The EJ program creates GIS maps for the following purposes:

- To show the geographic distribution of reported lead poisoning cases throughout Colorado
- To display areas with high risk for lead poisoning
- To target at-risk areas for outreach and abatement assistance



# Denver County



Children Under Seven  
With Elevated  
Blood Lead and  
Housing Built  
Before 1960 by  
Census Tract

 Local Streets  
 Highways

Housing Built  
Before 1950

 > 50

Housing Built  
From 1950-1959

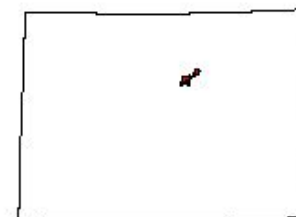
 > 50

Children With  
Blood Lead  
Above 10 mcg/dl

 1 - 5

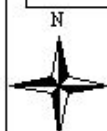
 6 - 12

 13 - 22



Denver County

5 0 5 10 Miles

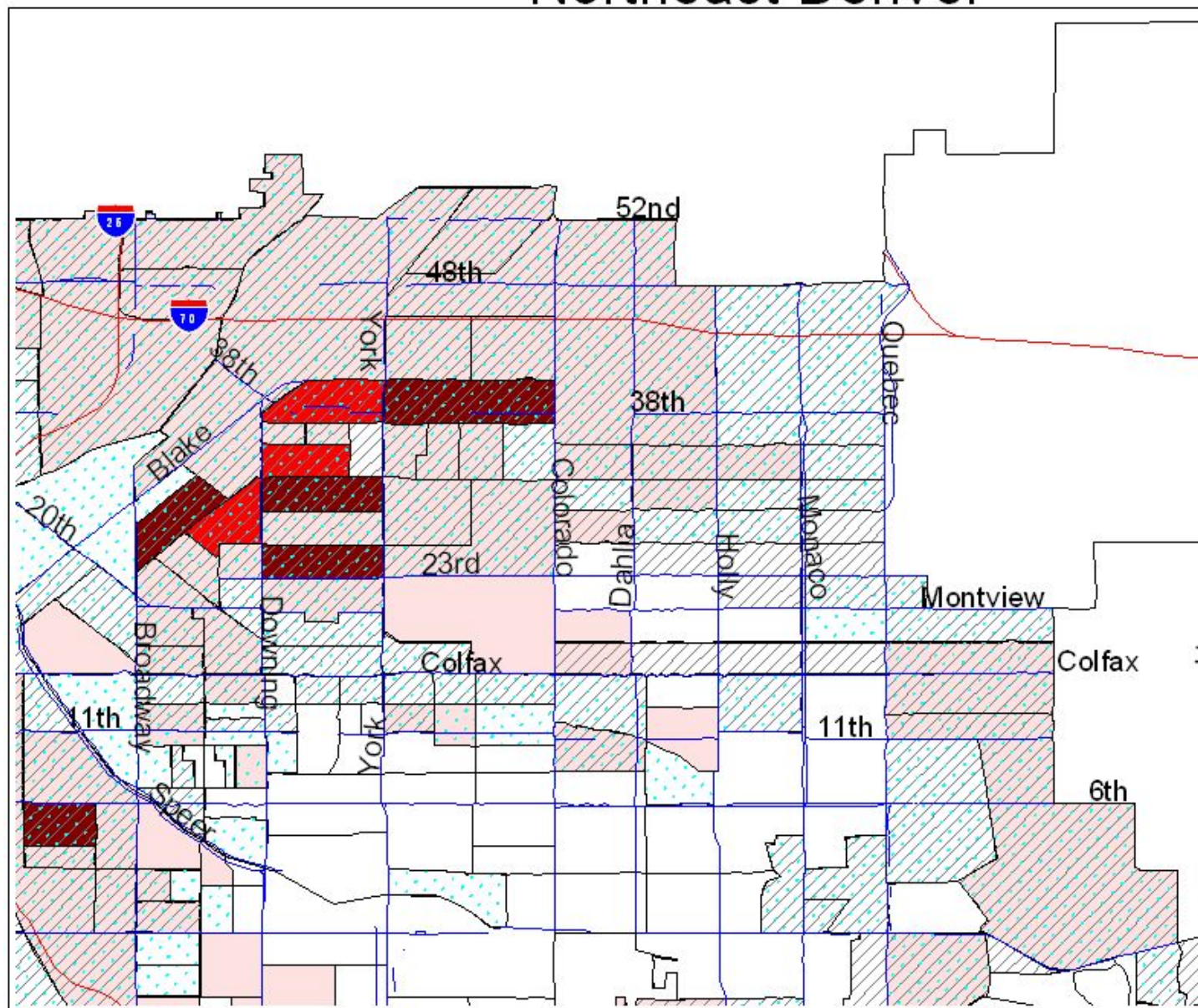


Produced by U.S. EPA Region 8 Office of Enforcement,  
Compliance and Environmental Justice.





# Northeast Denver



Children Under Seven  
With Elevated  
Blood Lead and  
Low Income/  
Minority Status by  
Census Block Group

Local Streets  
Highways

Percent Low Income

0 - 9.3%

> 9.3%

Percent minority

0 - 25.4%

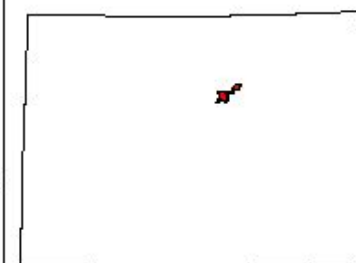
>25.5

Children under seven  
with EBL >10 mcg/dl

1 - 5

6 - 12

13 - 22



Denver County

3 0 3 Miles

Produced by U.S. EPA Region 8 Office of Enforcement,  
Compliance and Environmental Justice.



# Putting the Pieces Together

Eliminating Lead Poisoning requires addressing the problem by focusing on various activities that are related to lead poisoning.

## These Activities Include:

- Medical Management
- Source Abatement
- Regulatory Enforcement
- Outreach and Education
- Consumer Protection
- Data Collection and Sharing
- Interagency Cooperation



# Collaborative Partnerships

Carrying out these activities requires the involvement of several agencies, based on their areas of regulatory authority.

**In Colorado the following agencies are cooperating to fight lead poisoning**

- EPA
- CDPHE
- HUD
- Denver Environmental Health
- Northeast Denver Housing Center
- Medicaid CMS/HHS
- Rocky Mountain Poison and Drug Center
- Local County Health Departments

# Drafting a Statewide Strategic Lead Elimination Plan

EPA is helping local agencies draft a statewide strategic plan that will aid them in fighting lead poisoning by accomplishing the following tasks:

- Securing grants from CDC and HUD
- Maximizing the results of interagency cooperation
- Avoiding duplication of efforts
- Soliciting commitment from stakeholders throughout Colorado
- Combining resources of various agencies

# Objectives of the Plan

The stakeholders in the plan will work to end lead poisoning by accomplishing the following tasks:

- Work with pediatricians to encourage blood lead testing for at-risk children and provide follow-up care for children with elevated blood lead.
- Ensure that proper lead-safe remodeling practices are used by educating remodeling contractors.
- Provide consumer protection from imported cosmetics, pottery, toys, food products and folk medicines that contain lead.
- Increase the amount of qualified lead inspectors by providing training.
- Continue enforcement of laws related to lead poisoning prevention.



# Environmental Justice Contributions

Environmental Justice personnel and temporary interns have aided in developing the plan by:

- Soliciting stakeholder involvement
- Drafting documents related to developing the plan
- Creating a listserv for correspondence related to the plan
- Carrying out the GIS mapping project
- Conducting outreach and public education
- Involving Native American tribes in lead poisoning prevention



# How to Become Involved

For more information on becoming involved in EPA's lead poisoning prevention activities, visit EPA's websites or contact the following EPA personnel:

The Region 8 EPA homepage: [www.epa.gov/region08](http://www.epa.gov/region08)

The Region 8 EPA Environmental Justice homepage: [www.epa.gov/ej/index.html](http://www.epa.gov/ej/index.html)

The EPA National Lead website: [www.epa.gov/lead](http://www.epa.gov/lead) or call 1-800-424-LEAD (5323)

## **Personnel contacts**

Nancy Reish, Office of Environmental Justice Environmental Protection Specialist  
303-312-6046      [reish.nancy@epa.gov](mailto:reish.nancy@epa.gov)

Amanda Hasty, Office of Partnerships and Regulatory Assistance Lead Program  
303-312-6966      [hasty.amanda@epa.gov](mailto:hasty.amanda@epa.gov)

Alicia Aalto, Children's Environmental Health Coordinator Region 8 EPA  
303-312-6967      [aalto.alicia@epa.gov](mailto:aalto.alicia@epa.gov)